

U.S. Department of Transportation
Alternative Fuel Vehicle Acquisition Report for Fiscal Year 2002 (FY 02)

Authority

This report has been developed in accordance with the Energy Policy Act of 1992 (EPACT) (42 U.S.C. 13211-13219) as amended by the Energy Conservation Reauthorization Act of 1998 (Public Law 105-388) (ECRA), and Executive Order 13149, titled "Greening the Government through Transportation and Fleet Efficiency (E.O. 13149)."

Legislative Requirements

The Energy Policy Act of 1992 (EPACT) - requires that 75 percent of all covered light-duty vehicles acquired for Federal fleets in FY 99 and beyond must be alternative fuel vehicles (AFV) (where the fleets have 20 or more vehicles, are capable of being centrally fueled, and are operated in a metropolitan statistical area with a population of more than 250,000 based on the 1980 census). Emergency, law enforcement, and national defense vehicles are exempt from these requirements. EPACT also sets a goal of using replacement fuels to displace at least 30 percent of the projected consumption of motor fuel in the United States annually by the year 2010.

The Energy Conservation and Reauthorization Act of 1998 (ECRA) - amended EPACT to allow one alternative fuel vehicle acquisition credit for every 450 gallons of pure biodiesel fuel consumed in vehicles over 8,500 pounds gross vehicle weight rating. "Biodiesel credits" may fulfill up to 50 percent of an agency's EPACT requirements. In addition, Federal agencies must prepare and submit a report to Congress outlining the agency's AFV acquisitions and future plans each year for 14 years.

Executive Order 13149 (2000), Greening the Government through Federal Fleet and Transportation Efficiency (E.O. 13149) - directs Federal agencies operating a fleet of 20 or more vehicles within the United States to reduce their annual petroleum consumption by at least 20 percent by the end of FY 05 (compared to FY 99 levels) by using alternative fuels in AFVs more than 50 percent of the time, improving the average fuel economy of new light-duty petroleum-fueled vehicle acquisitions by one mile per gallon (mpg) by FY 02 and 3 mpg by FY 05, and using other fleet efficiency measures.

DOT's FY 02 AFV Acquisitions

Table 1 lists DOT's FY 02 AFV acquisitions.

Table 1: DOT's FY 02 AFV Acquisitions

Fiscal Year	Vehicle Acquisitions	Covered Acquisitions	AFV Acquisitions	AFV Percentage of Covered Acquisitions
FY 02	1,398	1,012	247	24%

During the FY 02 vehicle procurement cycle, DOT acquired 247 alternative fuel vehicles (AFVs). While DOT purchased AFVs in FY 02, it did not meet the 75 percent AFV-acquisition requirement; DOT acquired 24 percent of the required 75 percent. This shortfall is due to several factors, such as:

- DOT's special vehicle requirements
- Limited AFV Availability from the automotive manufacturers
- Limited AFV infrastructure support (refueling and maintenance)

The majority of DOT's missions fall under either transportation security or safety. For example, DOT operates a large number of light trucks that are specially equipped and outfitted for safety inspection missions. Because of their special configurations, it is difficult to utilize AFVs in these applications, and there is limited product availability in this vehicle class. Also, the AFV refueling and maintenance infrastructure is inadequate; there are only a small amount of AFV refueling stations, and the number of certified AFV dealerships is even less. These factors severely limit DOT's opportunities to acquire and operate AFVs.

DOT's FY 02 Vehicle Fuel Use

Table 2 presents DOT's FY 02 reported vehicle fuel use data.

Table 2: DOT Fuel Use in FY 02 (Reported)

Fuel Type	Quantity	Unit
Gasoline	4,755,619	Gallons
E-85	751,445	Gallons
Diesel	214,245	Gallons
CNG	16,857	Gasoline gallon equivalent
B20	0	N/A
M-85 Methanol	0	N/A
Total	5,738,166	Gallons
FY 99 Baseline	6,872,948	Gallons
Reduction	-1,134,782 (-17%)	Gallons

Reduction in Fuel Consumption - DOT has been making progress in reducing its fleet's petroleum consumption. By decreasing the vehicle miles traveled nearly 9%, and increasing the average fleet miles per gallon (mpg) from 24.4 to 24.8 mpg (compared to our FY 99 baseline), DOT has reduced its total fleet petroleum consumption by 17%.

Alternative Fuel Use - Currently, DOT cannot accurately report its alternative fuel use due to data capture issues in the fleet card industry. Fuel providers, credit card processors and credit card companies do not use the same product codes for alternative fuels. Product codes are used to identify the type of fuel being purchased; e.g. unleaded gasoline, diesel, gasohol, ethanol, etc. In most cases, the alternative fuel product codes (when they exist) cannot be forwarded through the fleet card industry's electronic network.

For example, there are various product code derivatives for ethanol fuel, such as E85 (85% ethanol), E10 (10% ethanol), oxygenated fuels, etc. These multiple product codes cause inaccurate reporting; for example, fuels that contain small blends of ethanol and are not defined by EPACT as an alternative fuel (e.g., E10 or oxygenated fuels) are sometimes inaccurately reported as E85.

DOT's EPACT and E.O. 13149 Compliance Strategy

To achieve compliance with the legislative mandates of EPACT and E.O. 13149, DOT's goal is to acquire 75 percent of new light-duty vehicles as AFVs, and use alternative fuel in these vehicles the majority of the time. DOT will pay for the incremental cost of AFVs acquired through the GSA Fleet Lease Program by using the 12-month rate option. DOT will also acquire the most fuel-efficient vehicles whenever possible. DOT is also studying the feasibility of using a 20% Biodiesel blend (B20) in our diesel-powered vehicles. However, DOT operates only a small number of diesel-powered vehicles so gains in this area will be minimal.

Key Initiatives - In order to meet the requirements, DOT is working on several fleet initiatives as part of our comprehensive compliance strategy. DOT's key initiatives are:

- Participate in the AFV USER Program
- Concentrate AFVs in centralized fleets
- Acquire fuel efficient vehicles
- Encourage the use of privately owned vehicles (POVs)

DOT has been participating in the AFV USER (Utilization Supporting the Expansion of Refueling) Program, - an interagency effort to increase the use of AFVs in the following cities:

- Albuquerque, NM
- Denver, CO
- Melbourne-Titusville, FL
- Minneapolis, MN
- Salt Lake City, UT
- San Francisco, CA

The goal of the program is to concentrate AFVs in the six cities in order to develop a market base for refueling and maintenance infrastructure. For FY 2002, DOT acquired 41 AFVs in the AFV USER Program areas. Currently, DOT has 111 AFVs in the AFV USER Program areas, and our goal is to acquire an additional 75 AFVs in these areas in FY2003.

Besides concentrating AFVs in the AFV USER areas, DOT has been working to concentrate AFVs in our centralized fleets that have adequate alternative fuel support infrastructure. For example, DOT's Headquarters operations in Washington, DC are operating 30 AFVs. These AFVs are part of the DOT motor pool; they receive high mileage utilization while giving DOT employees operational experience with AFVs.

DOT has been making progress in reducing our petroleum consumption through the acquisition of smaller, more fuel-efficient vehicles. By increasing our acquisition of compact sedans and light trucks, we have demonstrated a .4-mpg increase in our fleet's average mileage baseline (24.8 mpg) compared to our 1999 baseline (24.4 mpg), and a 17% reduction of total petroleum consumed. DOT has recently developed fleet standardization guidance that identifies fuel-efficient vehicle types for the several classes of vehicles we operate. DOT also plans to acquire hybrid vehicles when they become widely commercially available and affordable.

DOT allows its personnel to utilize POVs when it best serves the government interests, and encourages the use of POVs as a strategy to reduce our overall fleet size and petroleum consumption. We are currently studying our agency's POV use to quantify current and potential petroleum reductions from this initiative.

Future FY 03 and 04 AFV Procurement Planning

DOT's goal is to increase our covered AFV acquisitions to 55% in FY 03, and to entirely meet our AFV purchasing requirements during the FY 04 vehicle procurement cycle.

Table 3 indicates DOT's AFV acquisition plans for FY 03 and FY 04. Acquisition plans are difficult to forecast and normally vary 20% annually, because annual fleet procurement is effected by the vehicle age, mileage, and replacement, and resale values.

Table 3: DOT's FY 02 and 03 Planned Vehicle Acquisitions

Fiscal Year	Projected Vehicle Acquisitions	Projected Covered Acquisitions	Planned AFV Acquisitions	AFV Percentage of Covered Acquisitions
FY 03	1,445	962	525	55%
FY 04	1,388	925	693	75%